

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Canceled).

Claim 4 (New): A method of fabricating an optical fiber comprising:

depositing a first cladding having an outer diameter D so as to surround a core having an outer diameter d to make a porous core rod of  $D/d \geq 4.0$ , by using a vapor-phase axial deposition method;

dehydrating the porous core rod to reduce an OH group concentration in the porous core rod to 0.8 ppb or less by weight;

vitriifying the porous core rod after the dehydrating the porous core rod step to make a core rod;

stretching the core rod;

depositing a second porous cladding around the core rod after the stretching step by using a vapor-phase deposition method;

dehydrating the second porous cladding to reduce an OH group concentration to 50 ppm or less by weight;

vitriifying the second porous cladding after the dehydrating the second porous cladding step to make an optical fiber preform; and

drawing the optical fiber preform to make an optical fiber,

wherein the optical fiber formed via said drawing step has a transmission loss at a wavelength of 1.38  $\mu\text{m}$  less than a transmission loss at a wavelength of 1.31  $\mu\text{m}$  both before and after exposure to a 1% H<sub>2</sub> atmosphere at room temperature for 4 days.

Claim 5 (New): The method according to claim 4, further comprising:

exposing the optical fiber after the drawing step to a deuterium containing atmosphere  
at room temperature for a predetermined period.